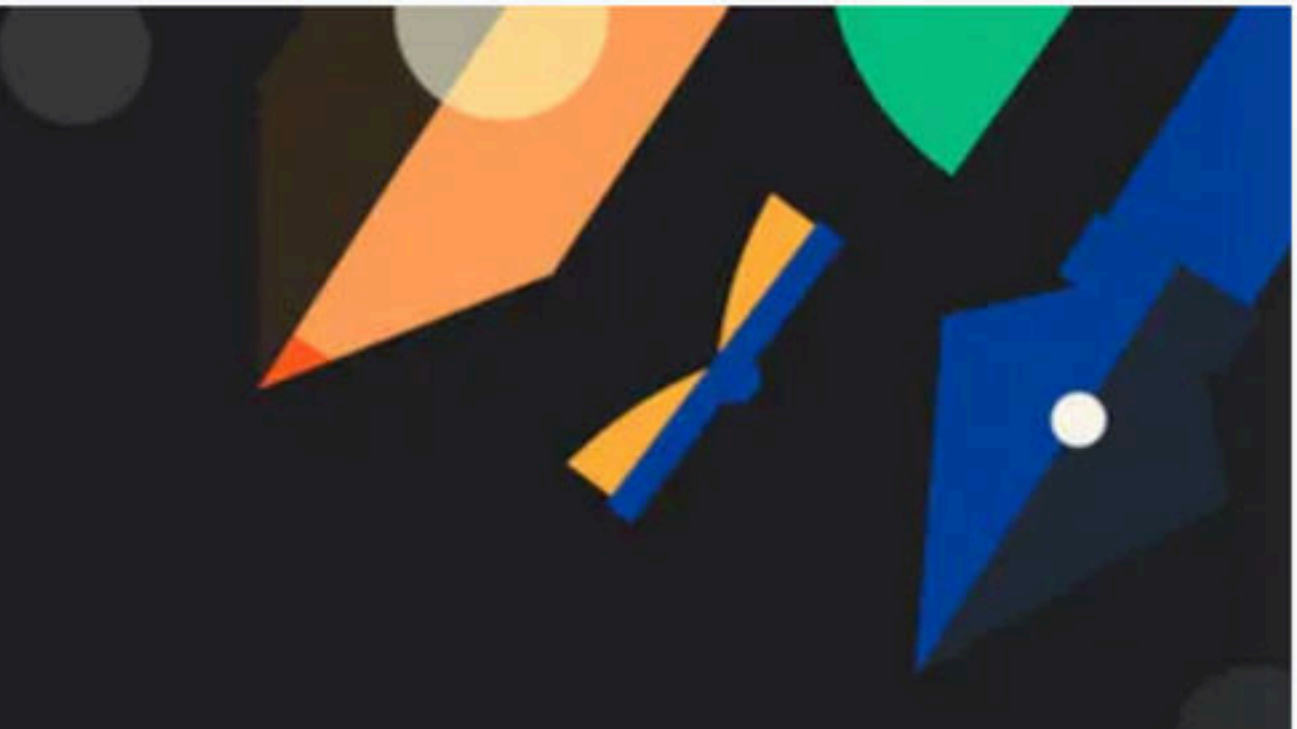




# Rapid Fire Lecture

Special class

Christy Varghese • July 14, 2022

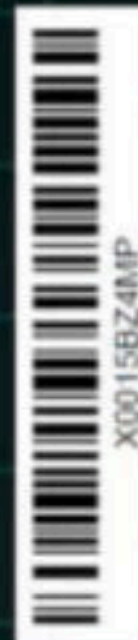
# Christy Varghese



- Author of bestseller books for CSIR-NET General Aptitude
- Trained 40000+ for General Aptitude and Vedic Maths
- Award Winning Author
- Certified Vedic Math Trainer from Vedic Math Academy, UK

## Salient Features of this book

- Latest syllabus - 16 theory chapters based on syllabus issued by CSIR
- Fully solved - 26 previous question papers with detailed solution
- Mock Tests - 10 model question papers for self-assessment
- 81 illustrated examples - To clearly understand the concepts
- Practice questions - 315 topic wise questions
- Tips and shortcuts - To solve problems quickly
- Difficulty Rating - Practise apt questions based on your skill
- Time rating - Time you should spend on each question set down
  - A comprehensive article on "How to approach general aptitude questions"
  - Additional online resources – To tackle General Aptitude better
  - Best-rated and best seller book in all online shopping sites
  - Recommended by prominent CSIR-NET/JRF coaching institutes



## About the Author

**Christy Varghese**, Co-Founder of ZedGuru e-learning services is a renowned expert in General Aptitude and Vedic/Mental Mathematics.

He is currently working as an Educator in Unacademy and as a faculty for General Aptitude in multiple institutes including Gurukulam Institute, New Delhi, IFAS and UV Physics Academy, Hyderabad. He gives online and classroom training to students across the country. His classes are branded "Christy's Classes". He was the co-developer of "CSIR-NET General Aptitude" mobile application, the first interactive android app for the General Aptitude section. He won the "100 Inspiring Authors of India - 2018" Award by 'The Indian Awaz'.

His first book "CSIR-NET General Aptitude - A New Outlook" is currently the National Best Seller book for CSIR-NET exam preparation. His second book "CSIR-NET Bhagh A" is the first comprehensive book in Hindi for General Aptitude section of CSIR-NET exam.

He did his Post Graduation in Mathematics at Pondicherry Central University and his graduation at SB College, Changanacherry. He also did his Post-Graduate Diploma in Computer Application from Pondicherry University.

Published by:



Distributed by:  
[www.scientificpub.com](http://www.scientificpub.com)



CSIR-NET General Aptitude - A New Outlook

Christy Varghese

2020 Edition

Enlarged  
**6<sup>th</sup>**  
Edition

Detailed solution  
of all 26 exam  
question papers  
upto December  
2018



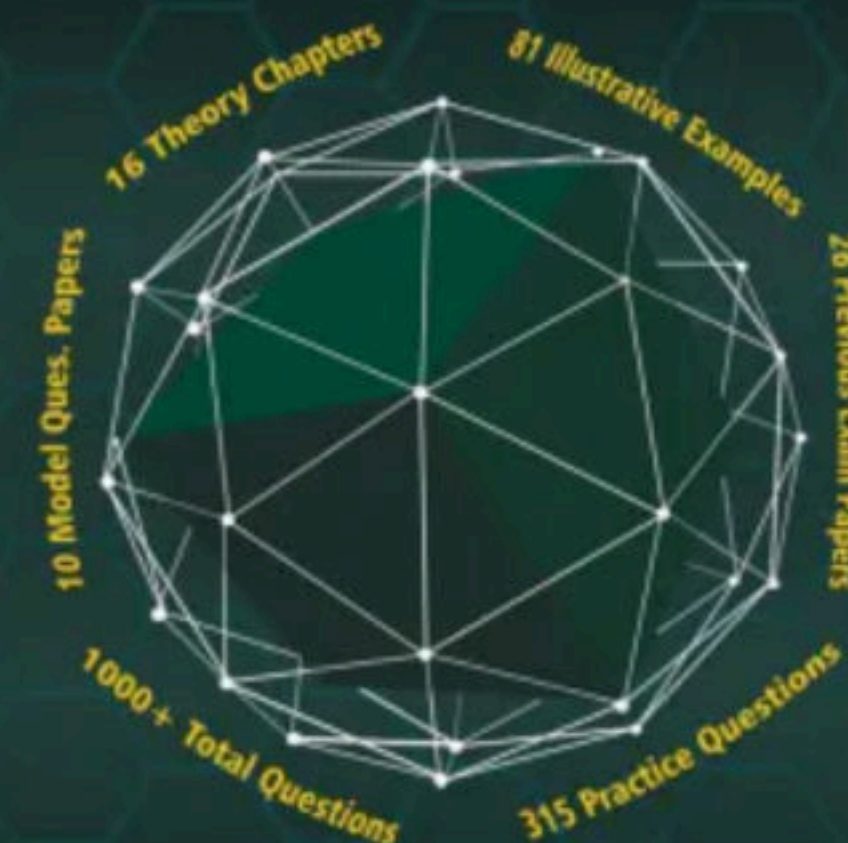
Gift Voucher +  
Online Resources

\*See inside

# CSIR-NET General Aptitude - A New Outlook

## CSIR-NET/JRF Part A section

Mathematical Sciences, Physical Sciences, Chemical Sciences,  
Life Sciences and Earth Sciences



**Christy Varghese**

# Science Streams - Poll

- A) Life Sciences
- B) Mathematical Sciences
- C) Physical Sciences
- D) Chemical Sciences
- E) Earth Sciences



## Complete Course on CSIR-NET General Aptitude

 July 4 | 8:30 AM to 10 AM

- Full-length topic-wise course
- Complete theory of CSIR-NET Part-A topics
- Detailed analysis of PYQs and practice questions
- Free study material
- For all CSIR-NET Science stream subjects
- Useful for GATE, SET and PhD entrance exams

**Christy Varghese**

**Enroll Now**

Referral code **CC10**



By Christy Varghese

# Complete Course on CSIR-NET General Aptitude

Course designed  
for the upcoming  
CSIR NET Exam.

Complete Theory

Previous Year  
Questions

Practice  
Questions

Shortcut  
Methods

Tips and Tricks  
for CSIR NET  
General Aptitude.

Downloadable  
Class Notes after  
Each Class as PDF.

Doubt Clearing  
Sessions after  
every 3 classes.

**For Life Sciences, Mathematical Sciences, Chemical Sciences,  
Physical Sciences and Earth Sciences CSIR NET Aspirants**

# Other Plus Courses - Capsule Courses

Numbers

Geometry

Mensuration

Average & Mixtures

Clock

Calendar

Monetary Problems

Probability

Permutations & Combinations

Data Interpretation

General Science

Speed Maths Tricks

Exam Hacks – Shortcut Methods, Tips & Tricks

## Other Plus Courses

CSIR-NET PYQ Course

CSIR-NET Practice Courses

GATE Complete Course

GATE PYQ Course

DBT Course

Vedic Maths Course

# **HOW TO TAKE UNACADEMY PLUS SUBSCRIPTION**

## **STEP 1**

**IN UNACADEMY APP OR WEBSITE, CREATE ACCOUNT WITH GOAL AS  
CSIR UGC NET.**

## **STEP 2**

**CLICK ON THE OPTION OF GET SUBSCRIPTION.**

## **STEP 3**

**CHOOSE THE DURATION OF THE SUBSCRIPTION.**

## **STEP 4**

**USE THE CODE CC10 IN THE REFERRAL CODE BOX TO APPLY 10%  
DISCOUNT. USE AVAILABLE CREDITS FOR EXTRA DISCOUNT.**

## **STEP 5**

**DO PAYMENT USING ANY OF THE PAYMENT OPTIONS AVAILABLE.**



HINGLISH

COMMON SUBJECT

## Course on General Aptitude through Model Papers for CSIR NET

Starts on Jul 18, 2022 2:00 PM



15 lessons



No practice added



HINGLISH COMMON SUBJECT

### Practice Course on General Aptitude for CSIR NET 2021

Starts on Apr 30, 2021 8:30 AM

25 lessons



HINGLISH COMMON SUBJECT

### Capsule Course on Data Interpretation for CSIR NET 2021

Starts on Apr 29, 2021 5:00 PM

5 lessons



HINGLISH COMMON SUBJECT

### Practice Course on Aptitude through 15 Model Papers

Next lesson on Apr 29, 2021 2:00 PM

20 lessons



ENGLISH COMMON SUBJECT

### Complete Course on GATE General Aptitude

Completed on Feb 5, 2021 • 43 lessons

43 lessons



ENGLISH COMMON SUBJECT

### Complete Course on General Aptitude for CSIR NET 2021

Next lesson on Apr 29, 2021 8:30 AM

60 lessons

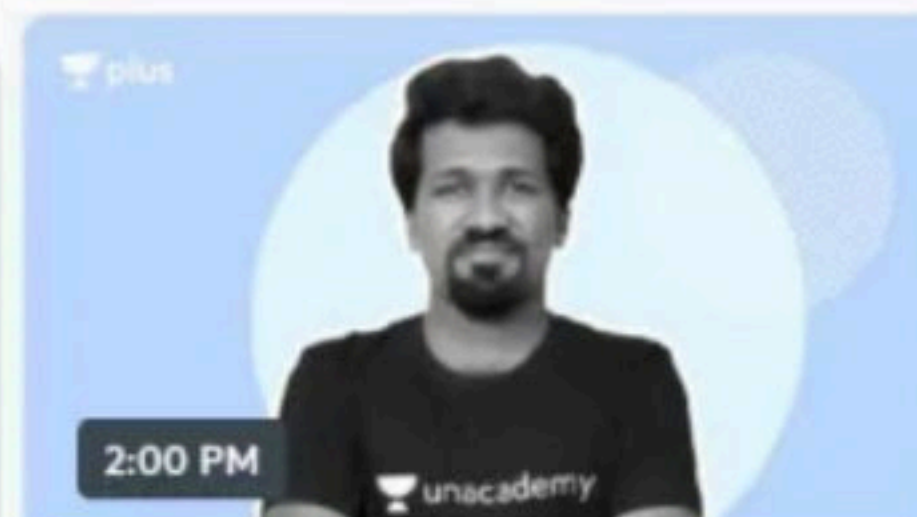


ENGLISH COMMON SUBJECT

### Booster Course on Basic Math & Arithmetic with Vedic Maths

Completed on Apr 1, 2021 • 46 lessons

46 lessons



HINGLISH COMMON SUBJECT

### Capsule Course on Monetary Problems

Next lesson on May 22, 2021 2:00 PM

5 lessons



HINGLISH COMMON SUBJECT

### Capsule Course on Probability, Permutations & Combinations

Completed on May 18, 2021 • 10 lessons

10 lessons

## **CSIR-NET NOV 2020**

**One of four suspects A, B, C and D has committed a crime. A and D are always truthful, and B and C are always untruthful. C and D are identical twins and the interrogator does not know who is who. If A says, “D is innocent”, B says, “A is guilty” and among C and D one says, “A is innocent” and the other says, “B is guilty” then which of the following is FALSE?**

- |                                   |                          |
|-----------------------------------|--------------------------|
| <b>(a) D said “A is innocent”</b> | <b>(b) D is innocent</b> |
| <b>(c) B is innocent</b>          | <b>(d) C is innocent</b> |

**Which number indicates the owners who are neither engineers nor good administrators?**

F = Good Administrators

E = Engineers

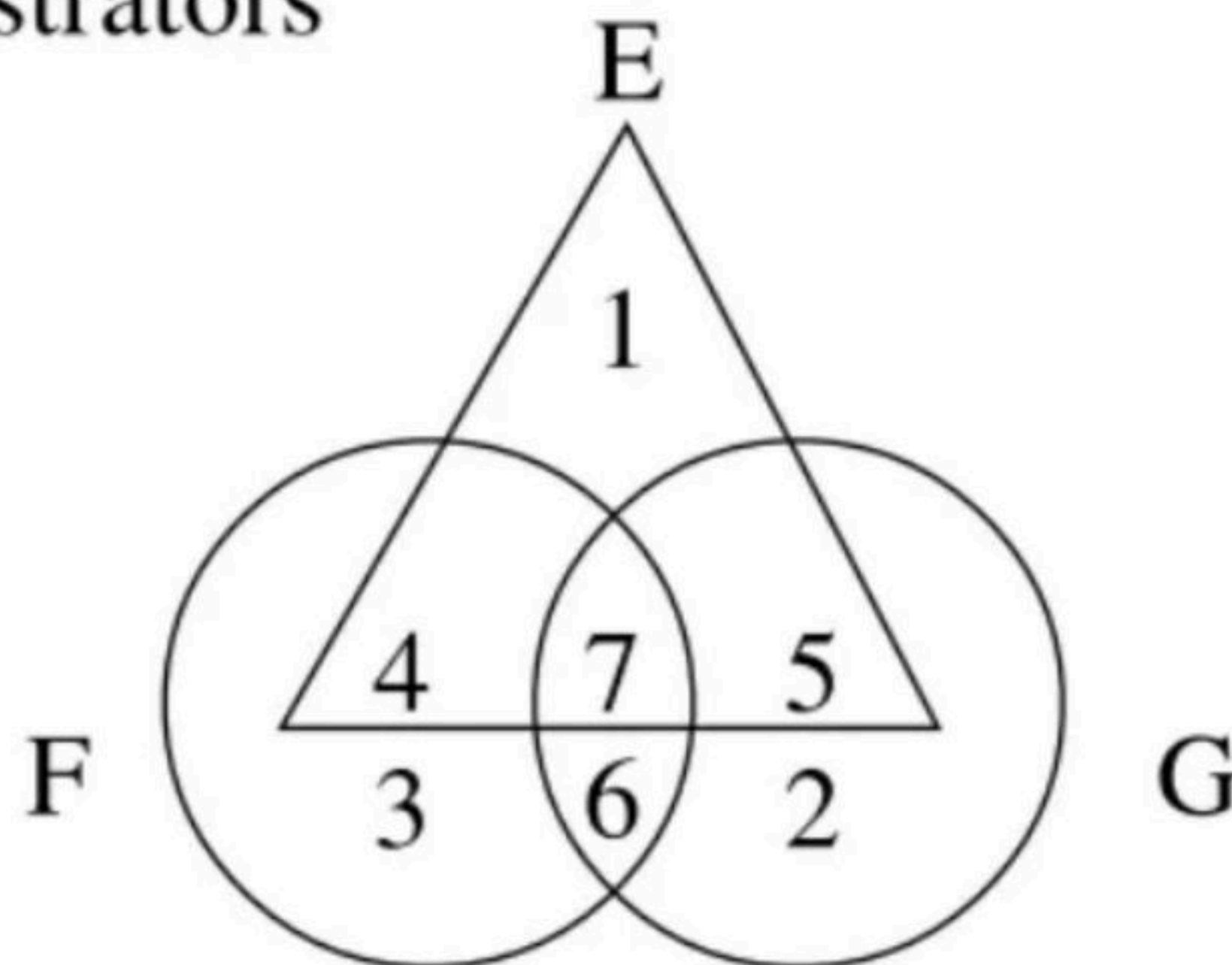
G = Owners

(A) 4

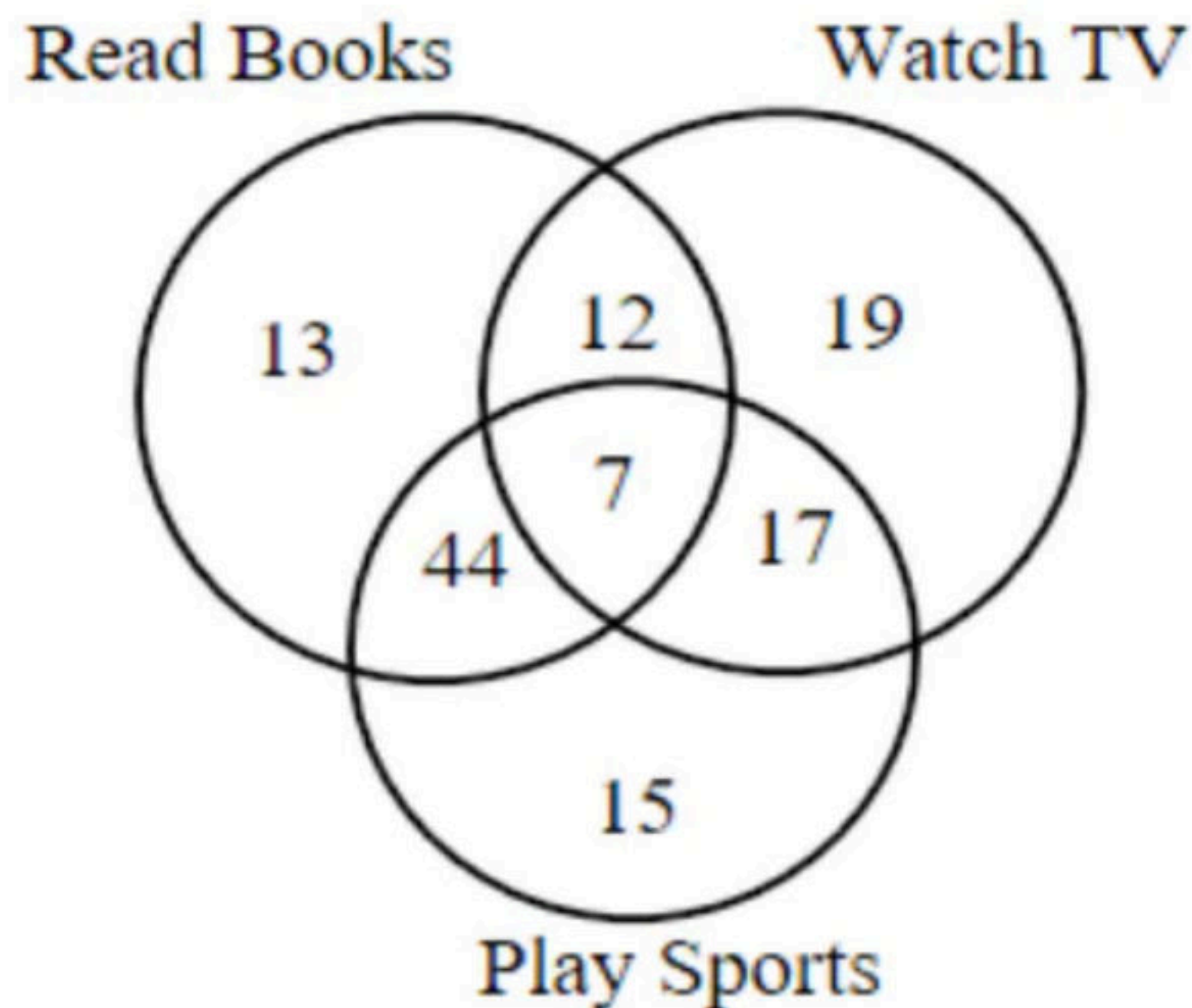
(B) 6

(C) 2

(D) 7



The Venn diagram shows the preference of the student population for leisure activities.



From the data given, the number of students who like to read books and watch TV is \_\_\_\_\_.

(A) 7

(B) 12

(C) 19

(D) 51

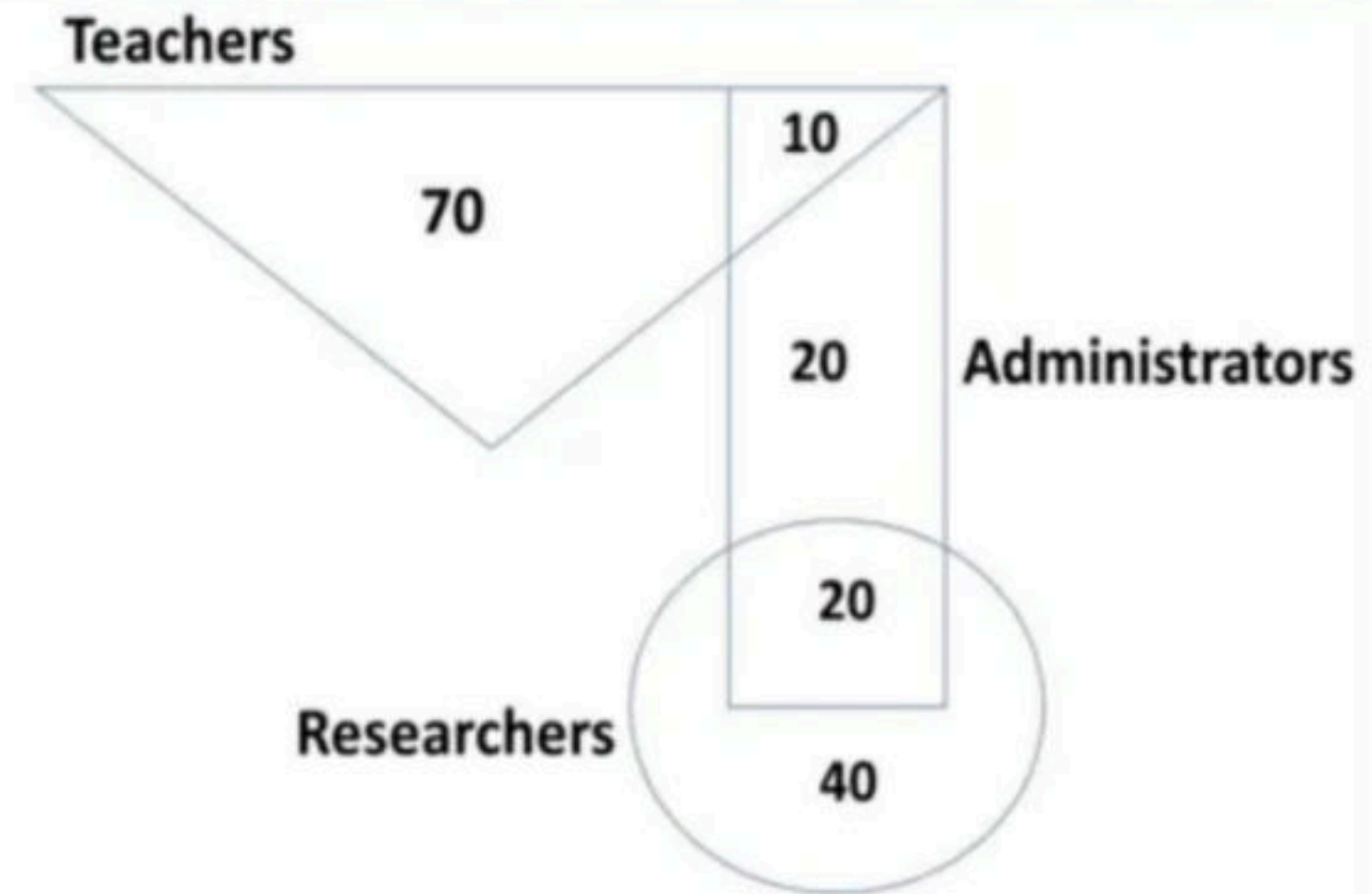
In the given diagram, teachers are represented in the triangle, researchers in the circle and administrators in the rectangle. Out of the total number of the people, the percentage of administrators shall be in the range of \_\_\_\_\_.

(A) 0 to 15

(B) 16 to 30

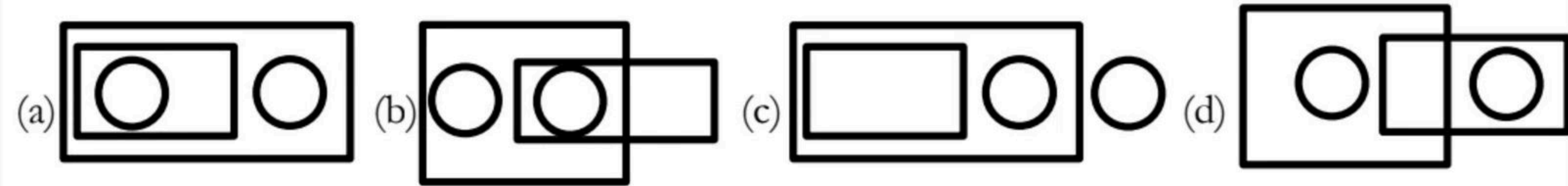
(C) 31 to 45

(D) 46 to 60

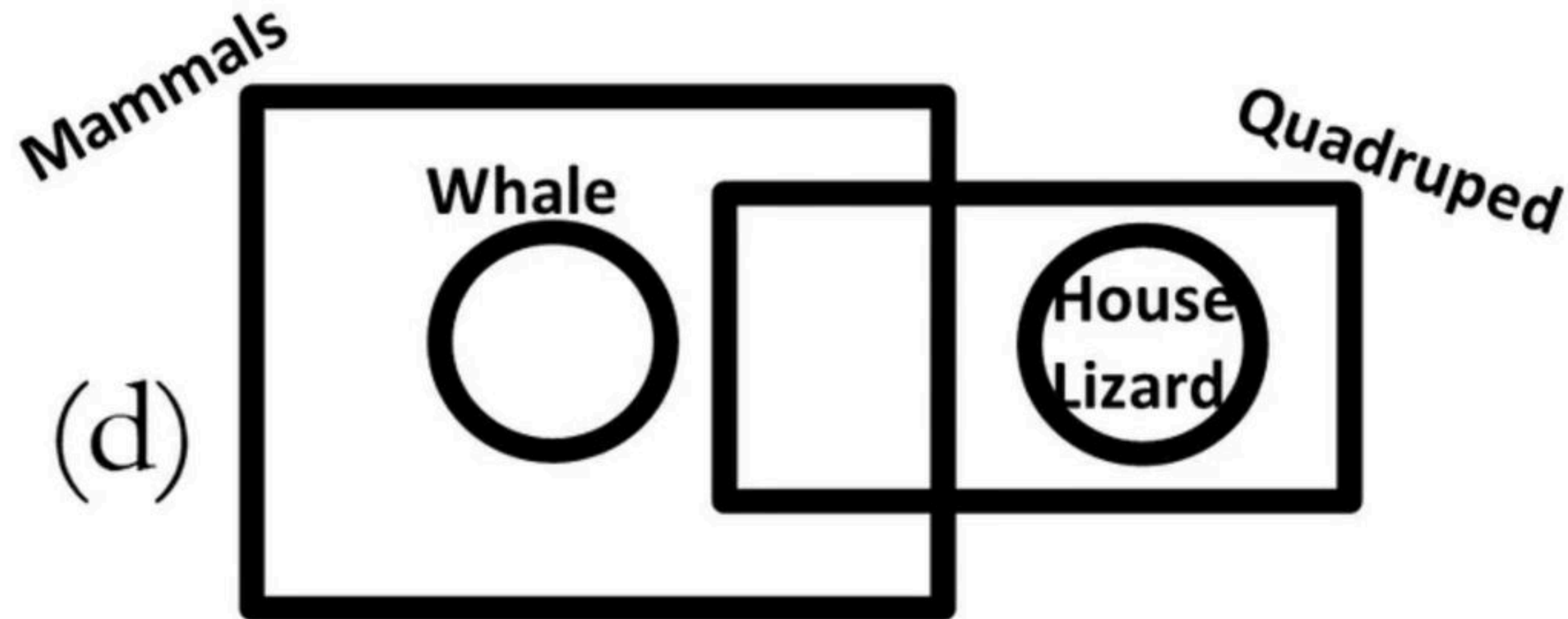


(GATE- 2019)

Which is an appropriate diagram to represent the relation between the following categories, quadruped, mammal, whale, house lizard?



**Some Mammals are Quadruped**  
**All House Lizards are Quadruped**  
**No Whales are Quadrupeds**  
**All Whales are Mammals**  
**No House Lizards are Mammals**  
**No House Lizards are Whales**



## **CSIR-NET JUNE 2019**

**Some aliens observe the roosters call before sunrise every day. Having no other information about roosters and sunrises, which of the following inferences would NOT be valid?**

- (a) Rooster-call and sunrise may be independent cyclic events with the same periodicity**
- (b) Both may be triggered by a common cause**
- (c) Rooster-call may be causing the sunrise**
- (d) Sunrise cannot be the cause of rooster call as the rooster-call precedes sunrise**

Consider **option (d)**:

**Sunrise cannot be the cause of rooster-call as the rooster-call precedes sunrise.**

Here it is particularly important to note that , aliens have no other information about roosters and sunrises.

Therefore, these aliens cannot confirm that rooster-call precedes sunrise.

It can also be possible that today's sunrise can cause tomorrow's rooster-call.



**In a group of researchers Biologists are thrice as many as Chemists whereas the Physicists are twice as many as Biologists. If there are 5 Chemists in the group, what is the total number of these three types of researchers?**

**(a) 30**

**(b) 45**

**(c) 50**

**(d) 75**

**CSIR-NET DEC 2019**

**There are 150 vehicles in a parking place. Each vehicle is either a bike or a car and is either red or green. Sixty vehicles are red, and 100 vehicles are cars. If there are 20 green bikes, how many red cars are there? (CSIR-NET NOV 2020)**

- (a) 70                                      (b) 30                                      (c) 40                                      (d) 50**

**There are 150 vehicles in a parking place. Each vehicle is either a bike or a car and is either red or green. Sixty vehicles are red, and 100 vehicles are cars. If there are 20 green bikes, how many red cars are there? (CSIR-NET NOV 2020)**

- (a) 70                                      (b) 30                                      (c) 40                                      (d) 50**

|       | Red | Green | Total |
|-------|-----|-------|-------|
| Bike  |     | 20    |       |
| Car   |     |       | 100   |
| Total | 60  |       | 150   |

**There are 150 vehicles in a parking place. Each vehicle is either a bike or a car and is either red or green. Sixty vehicles are red, and 100 vehicles are cars. If there are 20 green bikes, how many red cars are there? (CSIR-NET NOV 2020)**

- (a) 70                      (b) 30                      (c) 40                      (d) 50

|       | Red | Green | Total |
|-------|-----|-------|-------|
| Bike  |     | 20    | 50    |
| Car   |     |       | 100   |
| Total | 60  |       | 150   |

**There are 150 vehicles in a parking place. Each vehicle is either a bike or a car and is either red or green. Sixty vehicles are red, and 100 vehicles are cars. If there are 20 green bikes, how many red cars are there? (CSIR-NET NOV 2020)**

- (a) 70                                      (b) 30                                      (c) 40                                      (d) 50**

|       | Red | Green | Total |
|-------|-----|-------|-------|
| Bike  | 30  | 20    | 50    |
| Car   |     |       | 100   |
| Total | 60  |       | 150   |

**There are 150 vehicles in a parking place. Each vehicle is either a bike or a car and is either red or green. Sixty vehicles are red, and 100 vehicles are cars. If there are 20 green bikes, how many red cars are there? (CSIR-NET NOV 2020)**

- (a) 70**                                      **(b) 30**                                      **(c) 40**                                      **(d) 50**

|       | Red | Green | Total |
|-------|-----|-------|-------|
| Bike  | 30  | 20    | 50    |
| Car   | 30  |       | 100   |
| Total | 60  |       | 150   |

**CORRECT ANSWER : B**

## **CSIR-NET DEC 2014**

**Lunch-dinner pattern of a person of  $m$  days is given below. He has a choice of a VEG or a NON-VEG meal for his lunch/dinner**

- (1) If he takes a NON-VEG lunch, he will have only VEG for dinner**
- (2) He takes NON-VEG dinner for exactly 9 days**
- (3) He takes VEG lunch for exactly 15 days**
- (4) He takes a total of 14 NON-VEG meals.**

**What is  $m$ ?**

**(a) 18**

**(b) 24**

**(c) 20**

**(d) 38**

**Lunch-dinner pattern of a person of  $m$  days is given below. He has a choice of a VEG or a NON-VEG meal for his lunch/dinner**

- (1) If he takes a NON-VEG lunch, he will have only VEG for dinner**
- (2) He takes NON-VEG dinner for exactly 9 days**
- (3) He takes VEG lunch for exactly 15 days**
- (4) He takes a total of 14 NON-VEG meals.**

**What is  $m$ ?**

|        | VEG | NON VEG | Total |
|--------|-----|---------|-------|
| LUNCH  |     |         | $m$   |
| DINNER |     |         | $m$   |
| Total  |     |         | $m$   |

**Lunch-dinner pattern of a person of  $m$  days is given below. He has a choice of a VEG or a NON-VEG meal for his lunch/dinner**

- (1) If he takes a NON-VEG lunch, he will have only VEG for dinner**
- (2) He takes NON-VEG dinner for exactly 9 days**
- (3) He takes VEG lunch for exactly 15 days**
- (4) He takes a total of 14 NON-VEG meals.**

**What is  $m$ ?**

|        | VEG | NON VEG | Total |
|--------|-----|---------|-------|
| LUNCH  | 15  |         | $m$   |
| DINNER |     | 9       | $m$   |
| Total  |     | 14      | $m$   |

**Lunch-dinner pattern of a person of  $m$  days is given below. He has a choice of a VEG or a NON-VEG meal for his lunch/dinner**

- (1) If he takes a NON-VEG lunch, he will have only VEG for dinner**
- (2) He takes NON-VEG dinner for exactly 9 days**
- (3) He takes VEG lunch for exactly 15 days**
- (4) He takes a total of 14 NON-VEG meals.**

**What is  $m$ ?**

|        | VEG | NON VEG | Total |
|--------|-----|---------|-------|
| LUNCH  | 15  | 5       | $m$   |
| DINNER |     | 9       | $m$   |
| Total  |     | 14      | $m$   |

**Lunch-dinner pattern of a person of  $m$  days is given below. He has a choice of a VEG or a NON-VEG meal for his lunch/dinner**

- (1) If he takes a NON-VEG lunch, he will have only VEG for dinner**
- (2) He takes NON-VEG dinner for exactly 9 days**
- (3) He takes VEG lunch for exactly 15 days**
- (4) He takes a total of 14 NON-VEG meals.**

**What is  $m$ ?**

|        | VEG | NON VEG | Total        |
|--------|-----|---------|--------------|
| LUNCH  | 15  | 5       | $m = 15 + 5$ |
| DINNER |     | 9       | $m$          |
| Total  |     | 14      | $m$          |

**Lunch-dinner pattern of a person of  $m$  days is given below. He has a choice of a VEG or a NON-VEG meal for his lunch/dinner**

- (1) If he takes a NON-VEG lunch, he will have only VEG for dinner**
- (2) He takes NON-VEG dinner for exactly 9 days**
- (3) He takes VEG lunch for exactly 15 days**
- (4) He takes a total of 14 NON-VEG meals.**

**What is  $m$ ?**

|        | VEG | NON VEG | Total |
|--------|-----|---------|-------|
| LUNCH  | 15  | 5       | 20    |
| DINNER |     | 9       | 20    |
| Total  |     | 14      | 20    |

**CORRECT ANSWER : C**

## **CSIR-NET JUNE 2018**

**14 of the students in a class are girls. 8 students in the class wear blue shirts. 2 are neither girls nor wear blue shirts. 5 students who wear blue shirts are girls. How many students are there in the class?**

**(a) 19**

**(b) 29**

**(c) 17**

**(d) 24**

**Given 4: "5 students who wear blue shirts are girls."**

**$\Rightarrow$  Girls who wear blue shirts = 5**

|                | Boys | Girls | Total |
|----------------|------|-------|-------|
| Blue shirt     |      | 5     | 8     |
| Not blue shirt | 2    |       |       |
| Total          |      | 14    |       |



## CSIR-NET JUNE 2014

A  $4 \times 4$  magic square is given. How many  $2 \times 2$  squares are there in it whose elements add up to 34?

(a) 6

(b) 9

(c) 4

(d) 5

|    |    |    |    |
|----|----|----|----|
| 1  | 15 | 14 | 4  |
| 12 | 6  | 7  | 9  |
| 8  | 10 | 11 | 5  |
| 13 | 3  | 2  | 16 |

**A rule states that in order to drink beer, one must be over 18 years old. In a bar, there are 4 people. P is 16 years old, Q is 25 years old. R is drinking milkshake and S is drinking a beer. What must be checked to ensure that the rule is being followed? (GATE – 2017)**

**(A) Only P's drink**

**(B) Only P's drink and S's age**

**(C) Only S's age**

**(D) Only P's drink. Q's drink and S's age.**

|    |    |    |    |
|----|----|----|----|
| 1  | 15 | 14 | 4  |
| 12 | 6  | 7  | 9  |
| 8  | 10 | 11 | 5  |
| 13 | 3  | 2  | 16 |